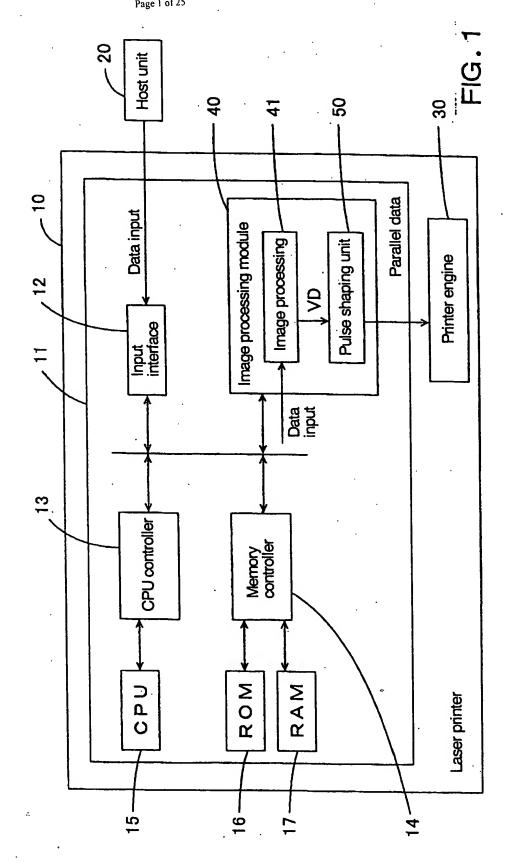Q80702
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FIG. 1

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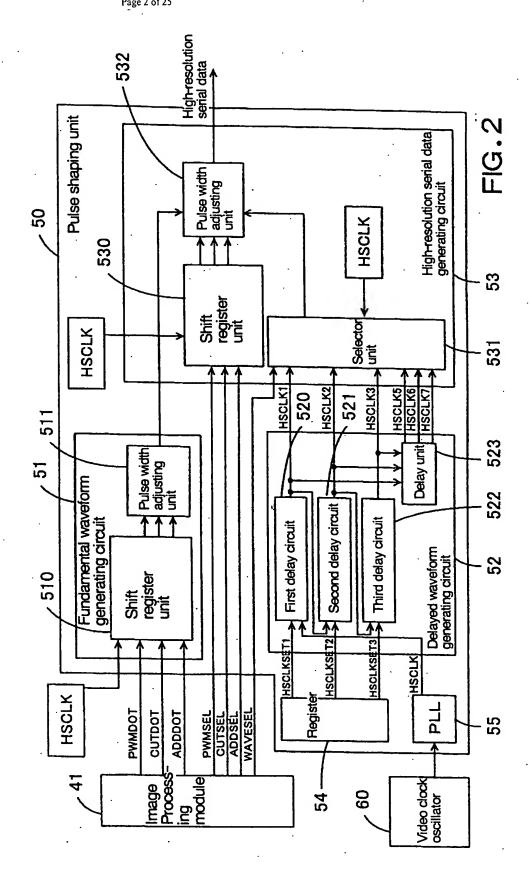Darryl Mexic (202) 293-7060
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FIG.2

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VD[7:2]

One dot

FIG.3

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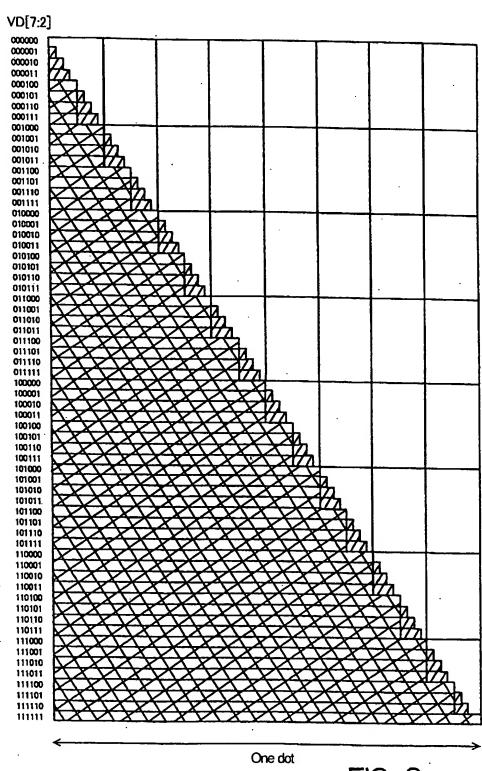PRINTER
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VD[7:2]

FIG.4

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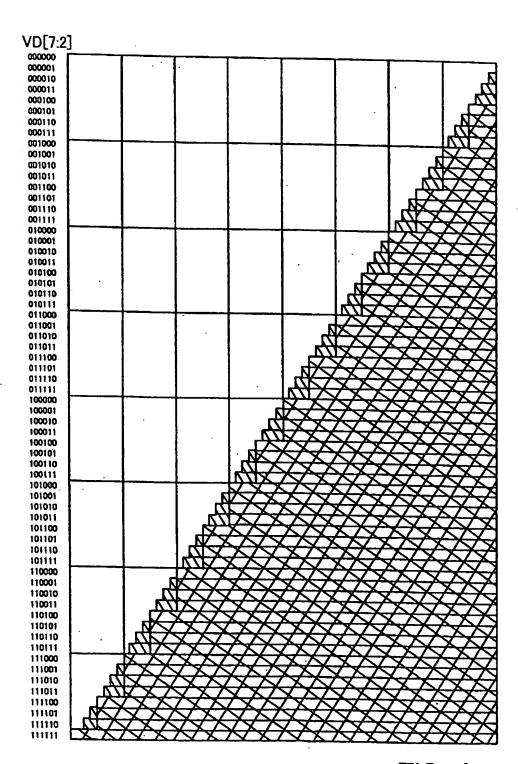PRINTER
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VD[7:2]

000000
000001
000010
000011
000100
000101
000110
000111
001000
001001
001010
001011
001100
001101
001110
001111
010000
010001
010010
010011
010100
010101
010110
010111
011000
011001
011010
011011
011100
011101
011110
011111
100000
100001
100010
100011
100100
100101
100110
100111
101000
101001
101010
101011
101100
101101
101110
101111
110000
110001
110010
110011
110100
110101
110110
110111
111000
111001
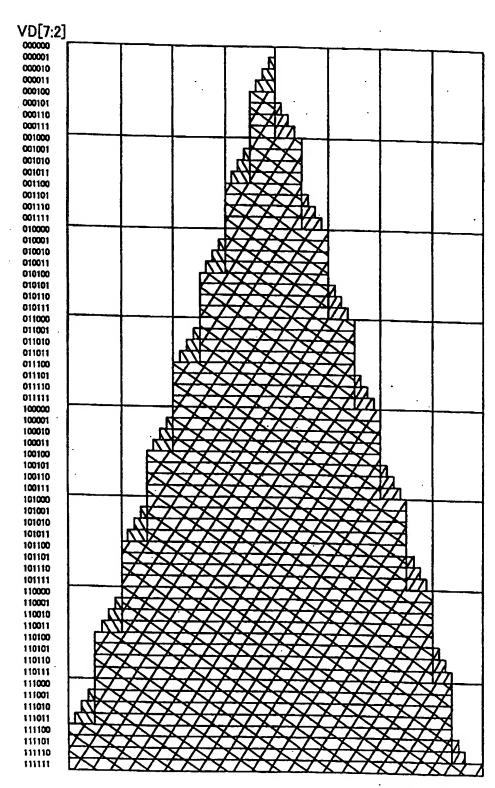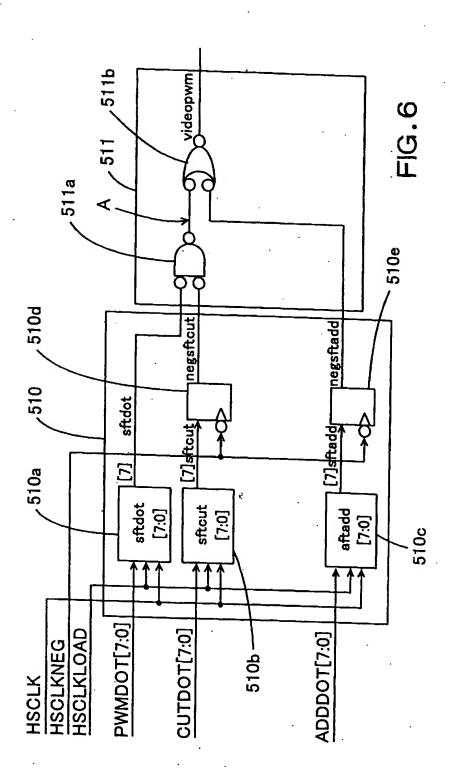111010
111011
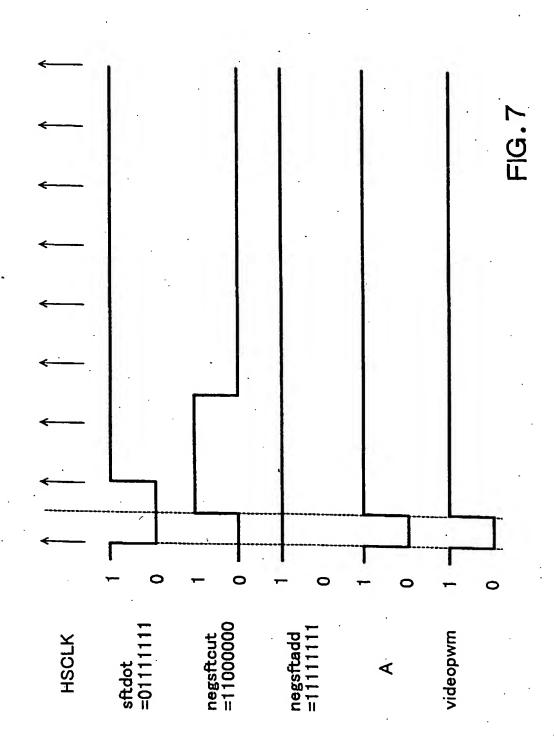111100
111101
111110
111111

FIG.5

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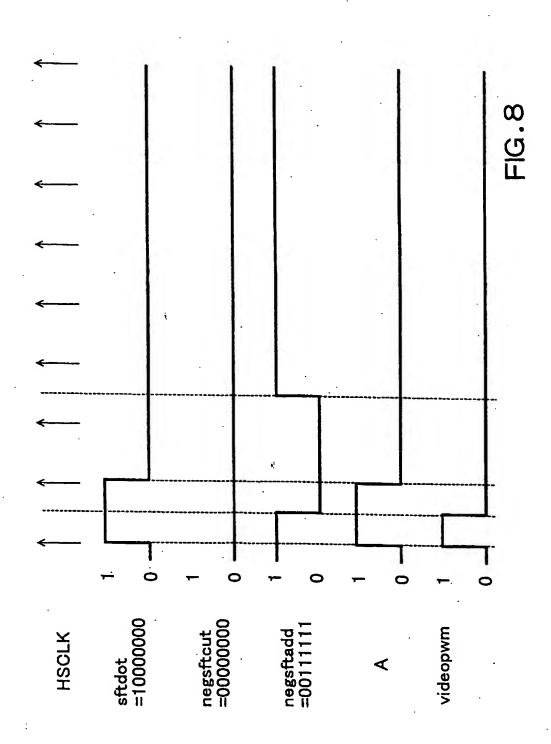PRINTER
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FIG.6

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FIG.7

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FIG.8

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VD[7:2]	videopwm
0000XX	
0001XX	
0010XX	
0011XX	
0100XX	
0101XX	
0110XX	
0111XX	
1000XX	
1001XX	
1010XX	
1011XX	
1100XX	
1101XX	
1110XX	
11110X,11110	
111111	

FIG.9

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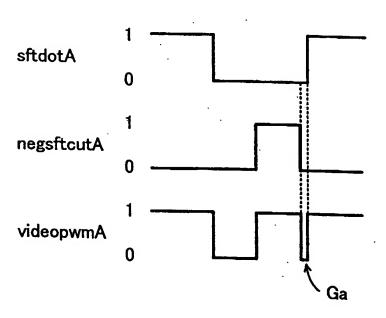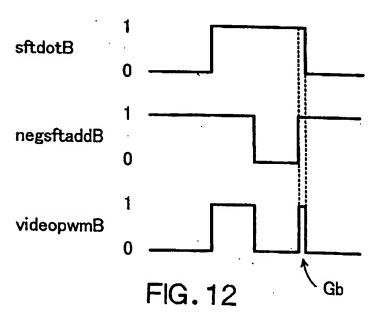| VD[7:2]	videopwm
0000XX	
0001XX	
0010XX	
0011XX	
0100XX	
0101XX	
0110XX	
0111XX	
1000XX	
1001XX	
1010XX	
1011XX	
1100XX	
1101XX	
1110XX	
11110X,11110	
111111	

FIG. 10

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VD[7:2]	videopwm
0000XX	
0001XX	
0010XX	
0011XX	
0100XX	
0101XX	
0110XX	
0111XX	
1000XX	
1001XX	
1010XX	
1011XX	
1100XX	
1101XX	
1110XX	
11110X,11110	
111111	

FIG. 11

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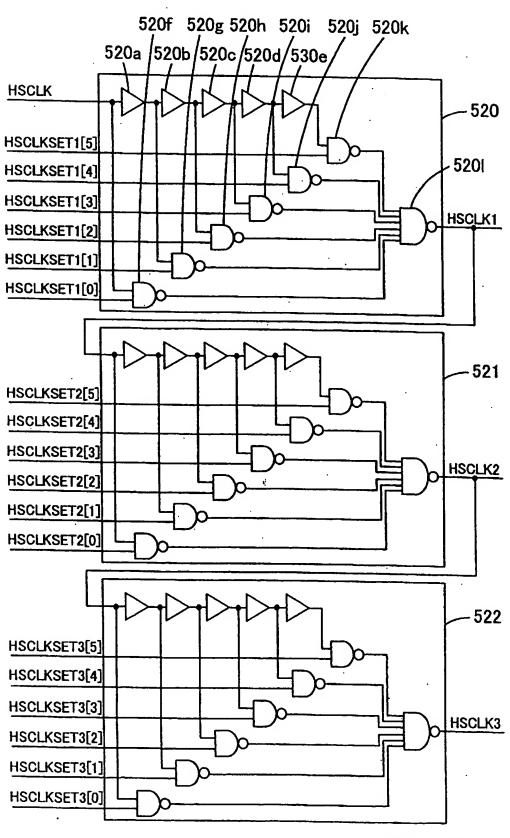PRINTER
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FIG. 12

FIG. 13

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FIG. 14

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FIG. 15

520a~520e

P

P1

1a   1b

P2

2a   2b

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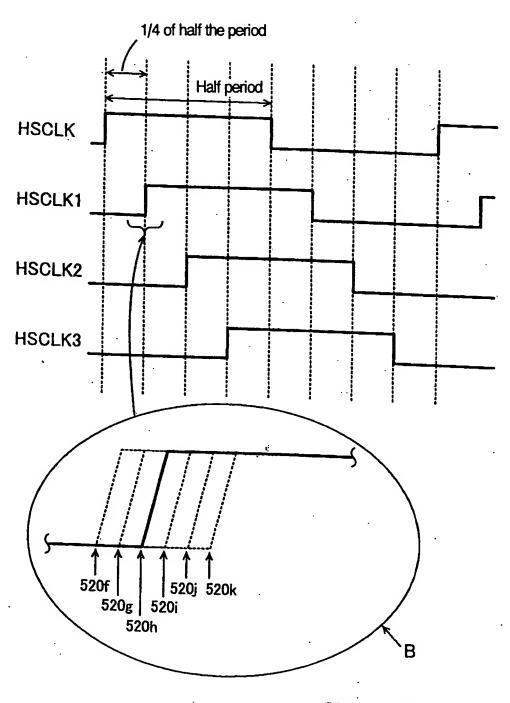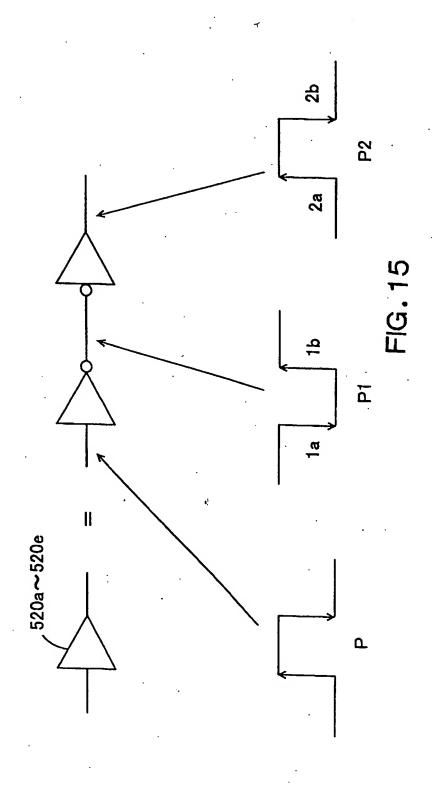PRINTER
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FIG. 16

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SHAPING METHOD AND METHOD OF
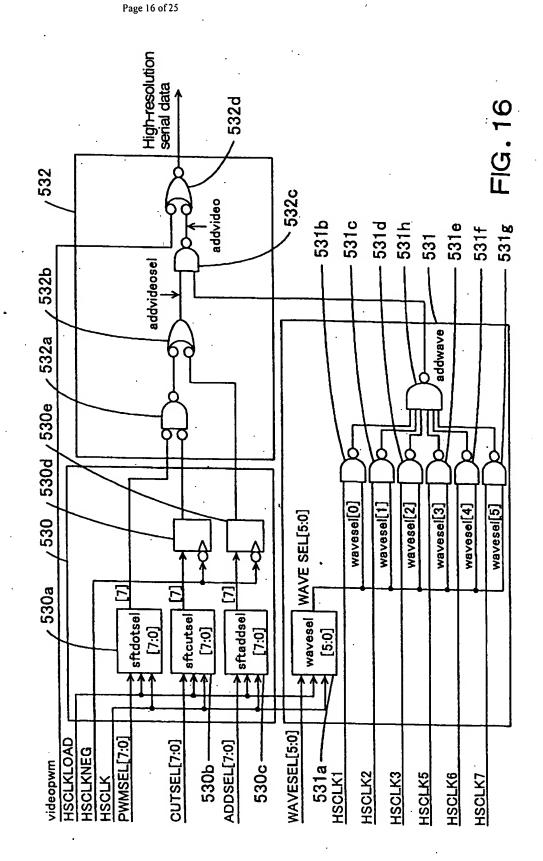GENERATING SERIAL VIDEO DATA FOR LASER
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Data structure	VD[4:2]	WAVESEL
Fig.3	001	001000
	010	010000
	011	100000
	101	000001
	110	000010
	111	000100
Fig.4	001	100000
	010	010000
	011	001000
	101	000100
	110	000010
	111	000001
	VD[5:2]	WAVESEL
Fig.5	0001	100000
	0010	010000
	0011	001000
	0101	001000
	0110	010000
	0111	100000
	1001	000100
	1010	000010
	1011	000001
	1101	000001
	1110	000010
	1111	000100

FIG. 17

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Data structure (Fig. 3)

VD[7:4]	addvideosel
0000	
0001	
0010	
0011	
0100	
0101	
0110	
0111	
1000	
1001	
1010	
1011	
1100	
1101	
1110	
1111	

FIG. 18

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Data structure (Fig. 4)

VD[7:4]	addvideosel
0000	
0001	
0010	
0011	
0100	
0101	
0110	
0111	
1000	
1001	
1010	
1011	
1100	
1101	
1110	
1111	

FIG. 19

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Data structure (Fig. 5)

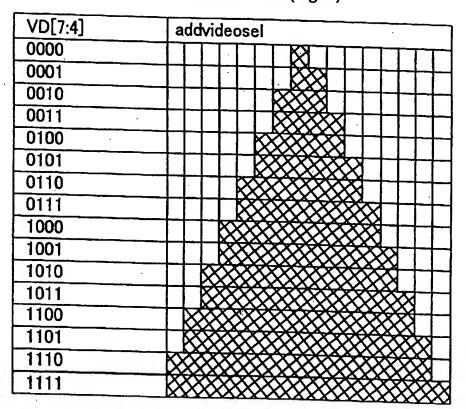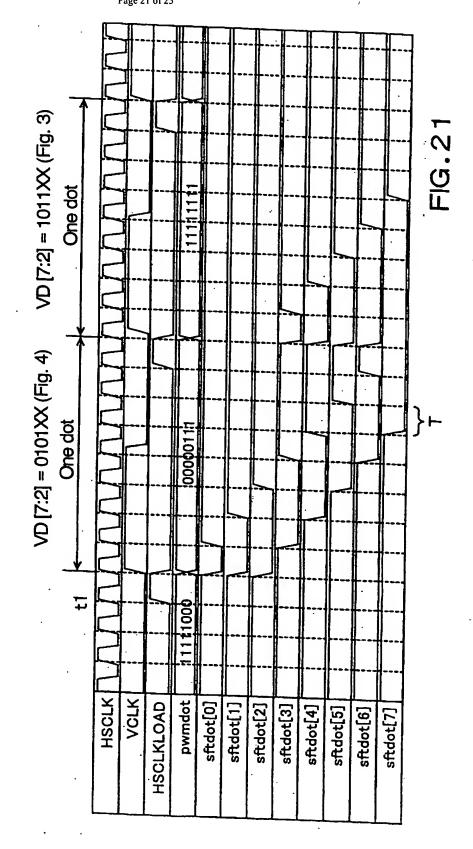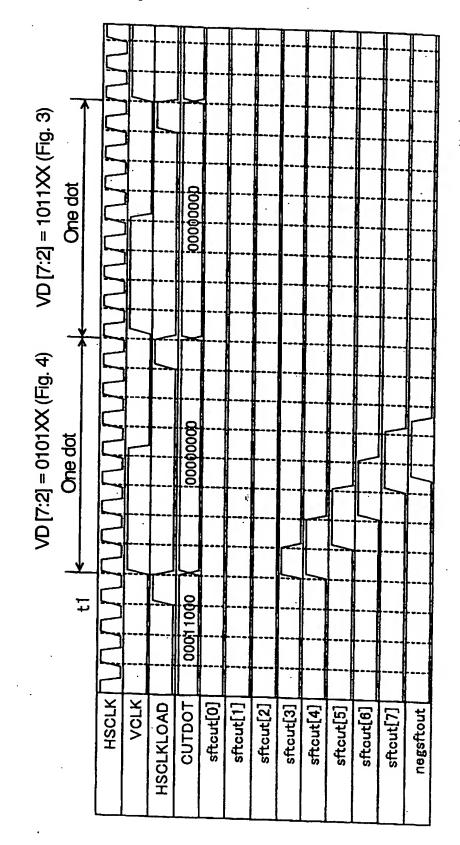| VD[7:4]	addvideosel
0000	
0001	
0010	
0011	
0100	
0101	
0110	
0111	
1000	
1001	
1010	
1011	
1100	
1101	
1110	
1111	

FIG. 20

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FIG. 21

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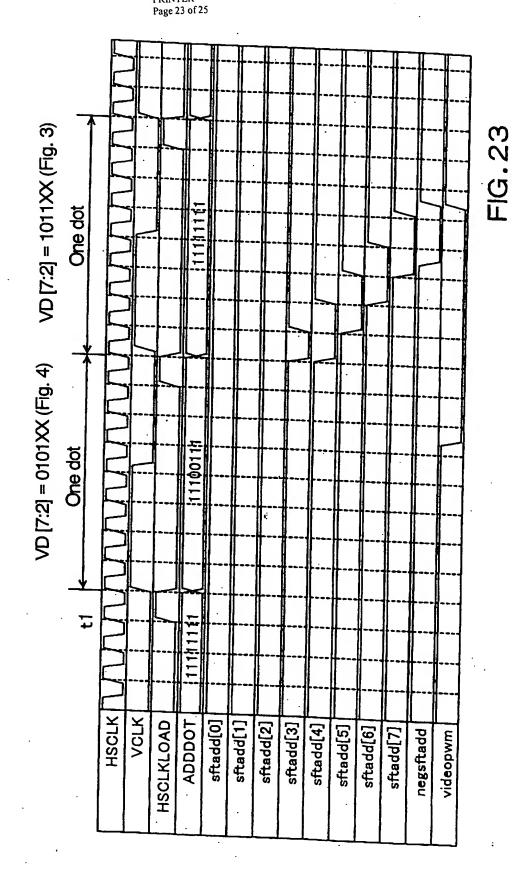PULSE SHAPING SYSTEM, LASER PRINTER, PULSE
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FIG. 22

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FIG. 23

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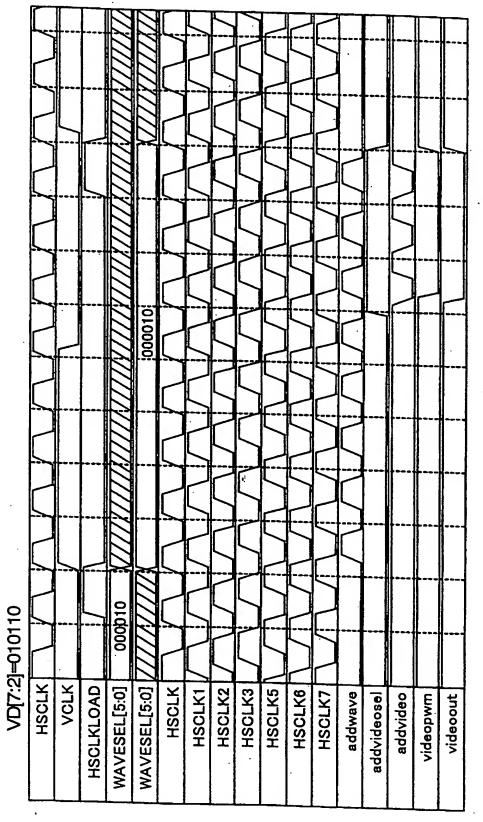PRINTER
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VD[7:2]=010110

HSCLK
VCLK
HSCLKLOAD
WAVESEL[5:0]   000010
WAVESEL[5:0]   000010
HSCLK
HSCLK1
HSCLK2
HSCLK3
HSCLK5
HSCLK6
HSCLK7
addwave
addvideosel
addvideo
videopwm
videoout

FIG.24

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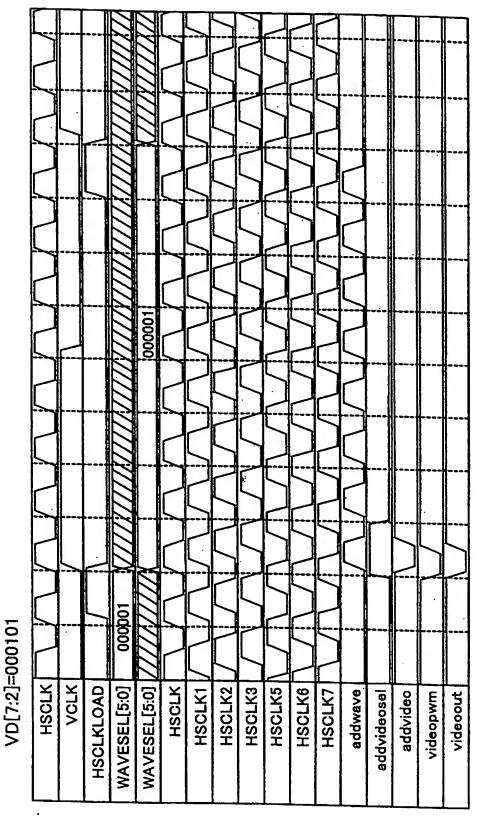PRINTER
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FIG.25